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## Online Services and Specialized Clienteles: Handicapped and Other Populations

My topic is service to other special populations and online catalogs and library automation. The special populations to be examined are the handicapped, the elderly, and the non-English speaking. It should be pointed out that although this paper's topic is the relationship of automation to patrons, most of the issues apply to employment of persons from these target groups. Affirmative action issues oblige librarians to consider the special needs of employees in addition to having the responsibility to serve patrons with special needs.

There are some general concerns librarians need to address when attempting to make online catalogs available for use by special groups. Librarians need to become knowledgeable about the needs and adaptations of each specialized group, then, as Susan Roman suggests for youth, the librarian must become an advocate on behalf of the special patron to ensure the adaptation of automation services through physically and intellectually appropriate system design.

### Serving Handicapped Persons

Most librarians have the potential to serve both the physically disabled and the intellectually impaired. The definition of a handicapped condition used in this paper is a physical or intellectual anomaly that presents the individual with difficulty in dealing with a built environment. The library as a whole presents both a physical and intellectual environment. Specifically, online services are designed in such a way as to present impediments to use by both types of disabled persons.

Based on 1970 census data and using Illinois as an example, about one out of every seven noninstitutional adults is disabled and about one in twenty is severely disabled.<sup>1</sup> What is striking about these numbers is that I have not observed this high a proportion of disabled individuals among most library user populations. There are two reasons for this. One cannot always tell by looking whether an individual is disabled. The other is that many disabled persons do not use libraries either because of architectural barriers or the belief that libraries are not for the disabled.

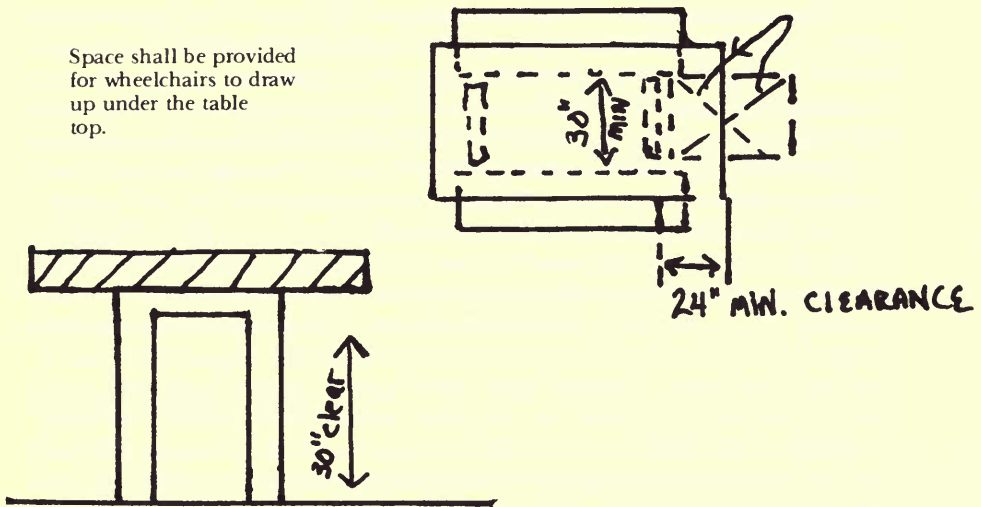
As many librarians are aware, access to publicly supported services is a legal issue. The Architectural Barriers Act of 1968 (PL 90-480), states that "any building constructed or leased whole or in part with federal funds must be accessible to and usable by the physically handicapped."<sup>2</sup> More recently PL 94-142, the Education for All Handicapped Children Act of 1975, requires education for handicapped children in the least restrictive environment possible. These laws directly affect school and academic libraries by requiring service to handicapped individuals in the same environment in which service is provided to others. In addition to federal law, state and local governments legislate the physical access and nondiscrimination in services offered by agencies using public funds.

Going beyond legal issues, it can be argued that, librarians, as members of a service profession, have a moral or ethical responsibility to adapt services and environments to be usable by disabled people. I do not think, however, that in practice librarians demonstrate enough concern for these issues. Often the attitude is passive rather than active. If a disabled person asks for service, he or she receives it, but there is no interest in adapting the environment in anticipation of the disabled person's needs. Service to special groups is often viewed as a luxury that most libraries cannot afford. Probably the first step to serving disabled people and providing usable online services is recognizing that serving the disabled is an essential institutional commitment, not just a nice idea when one gets around to it.

In examining automated service and the use of online catalogs by disabled persons, one must consider both hardware and software. The first step in providing for the use of online catalogs by the disabled is to look carefully at the architecture and interior design of the library. To help in this evaluation one should check local and state building codes and measure the library's space arrangement against the standards.

The two aspects of interior design most pertinent to online catalog use by those in wheelchairs or the orthopedically impaired are table measurements and placing terminals within comfortable reach. A comfortable and efficient environment is essential for successful online use. Tables should be 30 inches high from the floor to the lip of the table, be 30 inches wide and have 24 inches clearance (see fig. 1).<sup>3</sup>

Figure 1. Minimum Table Requirements



Without a properly designed table the person in a wheelchair will be too far away to reach the keyboard or adjust the terminal comfortably. The placement of tables should allow a person in a wheelchair or one who must sit, to use both the keyboard and monitor.

It may be that physically disabled individuals will not be able to use a keyboard. For instance, a person who has restricted use of arms, has poor small-motor control, or who is severely sight impaired may not be able to use an online catalog, but be able to use bibliographic citations or material (e.g., large-print books) housed in the library. It should be library policy for staff to make the extra effort to do a full search for the disabled patron. If a library serves a community in which there are special programs or residences for orthopedically disabled people, it may be possible to adapt a terminal for use by these patrons. Peter McWilliams has written a useful and thorough book on adapting personal computers that will give librarians an idea of what can be done.<sup>5</sup>

Most building codes as well as common sense stress that while it is necessary to provide access to enter the library as well as inside the building, it is not necessary to have *every* table adapted to accommodate wheelchairs. It is important to have a terminal available, have it centrally located, and make it well known to the community that this environment is available.

For other disabled groups, the concern moves from hardware to software. From the hearing-impaired, online catalogs can help bypass the numerable communication problems the individual has in finding library resources. The online catalog, once mastered, can reduce the need for the hearing-impaired person to communicate orally with library staff and, in effect, open the collection to those with severe hearing loss. Librarians should arrange for training, including learning sign language. As many of the hearing-impaired have difficulty with spelling and grammar and with learning language skills, training should be carefully planned, and extensive reinforcement and practice will be necessary. Programs need to be very friendly, with well-developed help and error sequences.

Another group of disabled patrons is those with intellectual impairment. They include the retarded and the learning disabled. The profoundly retarded are excluded from this discussion as they do not need catalogs. They use library facilities as browsers, bypassing both card and online catalogs. The primary aspects of intellectual impairment are diminished memory, attention span, and capacity to spell and use words. Normal adults can hold five to seven items in short-term memory. Retarded individuals can hold fewer items, and the learning disabled cannot keep items in order. For both groups, small amounts of information presented in a highly organized structure enhance learning. As with the hearing impaired, spelling and vocabulary present constant problems and a learning session should be short with ample repetition and practice.

In translating these considerations to online catalog use, the focus should be on the design of the software and well-planned training. Touch screens probably are easier to use for the intellectually impaired as they eliminate the need to type words. Many touch programs, however, require alphabetizing skills that may be difficult for disabled patrons. This is an aspect of using the online catalog that will have to be included in training. Programs should scroll slowly to allow for use by slow readers, and help and error functions should be clear and easy to manipulate. The program should allow the user to determine how long a screen will be displayed and not have automatic limits.

The other area that needs modification is the amount of information in the online catalog. For librarians it is a strength to cram as much information as possible into each file. For most patrons this is confusing. For the intellectually impaired it can be devastating. Information overload and the use of jargon and acronyms can make online entries unintelligible. Entries should be standardized, clearly organized, and use the simplest form possible.

As with serving other disabled groups, both staff and the intellectually impaired will need training. Staff should be made aware of the characteristics and capabilities of the mildly retarded and learning-disabled adults.

This will help staff be more patient with errors and more effective in assisting patrons with the online catalog. In designing training of intellectually impaired people, librarians should seek advice from specialists in these areas. Local agencies or groups serving adults with learning impairments may be able to help in planning realistic training programs and help in promoting the library's services to the disabled.

The key considerations in providing online services to handicapped individuals is to plan an environment that allows physical access, to provide training that is suited to handicapped persons, and to understand that handicapped persons—like all persons—need individual help. If library staff are rude or stereotype disabled persons, these patrons will not make the effort to use online catalogs. To insure that the software is as usable as possible for a variety of disabled users, librarians need to keep the needs of the disabled in mind when working with programmers and vendors.

### **Serving Elderly Persons**

The second special user population is individuals over the age of sixty-five. About 11 percent of the American population is over age sixty-five, and this is one of the fastest growing segments of our population.<sup>6</sup> Most libraries immediately affected by this demographic change will be public libraries, but as community colleges and universities seek to attract students outside the traditional eighteen to twenty-two age group, more senior citizens will want to use academic libraries. This population will need special help in adjusting to changes in libraries related to automation.

Knowledge is a key component to effective service. Librarians need to be knowledgeable about the aging process and sensitive to designing services that meet the elderly's needs. Experts in gerontology describe the elderly population as varied. Not all abilities deteriorate at the same rate and each individual has his or her own combination of skills. In general, there are more elderly women than men, and those over sixty-five tend to be less well-educated than younger Americans.<sup>7</sup>

The elderly may need specially adapted environments (e.g., be able to sit while doing a search, or to view entries on large-print screens) because of physical disabilities associated with old age. The librarian also needs to create an environment in which the elderly will feel comfortable in using automated services. Often we associate resistance to change with aging. Librarians need to avoid stereotyping or condescension. Training for the elderly should be well planned and give opportunities for self-paced learning, and practice and reinforcement to allow for skill development in each individual. Librarians should be prepared to repeat instructions and be patient with persons who progress slowly.



Another activity that will be productive is to cooperate with agencies and individuals who work directly with the elderly. Senior citizen centers can be an important link in publicizing and legitimizing changes in service in the library. Coordination with agencies serving the elderly and other special groups can suggest target training and design of services for each group. This will help librarians achieve the goal of effective use of online catalogs by all groups in the community.

### **Service to Non-English Speakers**

There are more than 1.3 million students in America's schools whose primary language is not English and who receive bilingual instruction.<sup>8</sup> In Illinois, the largest immigrant group is made up of Hispanics. The Asian population is significant in numbers and there is also a stable number of students whose primary language is Polish or Greek.<sup>9</sup> In my last job, I developed library services in Chicago for Head Start, the federally funded preschool program. We identified over fifty language and cultural groups and, in general, we found most of our clients eager and excited by library services we offered. Many universities and colleges have increased enrollments by admitting foreign students, so both public and academic types of libraries need to examine services to the non-English speaking.

There are three service areas of concern when helping non-English speakers use online catalogs. First, instruction sessions, signage, and written explanations should be bilingual. The librarian may need to find a language volunteer or consultant to help develop programs and handouts. Many foreign citizens and students read English more effectively than they listen to spoken language, so once instruction takes place, effective use of online catalogs can take place.

A second area of concern is that of cultural differences. Many foreign-born persons do not fully understand American libraries. They are not accustomed to the openness or the vastness of the resources available. Also, they may not feel comfortable in seeking help from librarians. It is important to stress some of the basic rules for library use as well as the use of online systems.

Third, it is important to create non-English databases. Often non-English titles are the last to be put online or are never put in machine-readable form. If the library has non-English materials, there should be non-English citations in the database. It would also be interesting to have databases where commands were in a language other than English. Work is now being done to perfect programs that translate from one language to another. If this is developed we could even provide bi- or trilingual online catalogs.

It is important to provide for meaningful use of online catalogs to non-English speaking patrons. To do this we must respect cultural differences that might exist, provide training and training materials in appropriate languages, and speed the development of databases to include non-English entries and bilingual commands.

## Conclusion

The purpose of this article has not been to introduce startling new ideas about human issues and automation, but rather to remind librarians of their responsibility to serve all segments of the population and of the capability to expand the body of library users by keeping an open mind and doing careful planning.

Information is power. Those "in the know" will go farther than those who are ignorant. We have designed and now work to perfect online catalogs and automation systems to provide better, more fair access to information. We must take the responsibility to ensure that online catalogs are usable and useful to the disabled, the elderly, and the non-English speaking. Librarians have the intelligence, the creativity, and the energy to provide access to all groups within the community served. It only remains to make the commitment to use our capabilities to help special populations.

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